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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,492	03/26/2004	Ted Guidotti	018798-222	7892
21839 BUCHANAN	7590 08/10/2007 INGERSOLL & ROONEY	⁷ PC	EXAMINER	
POST OFFICE	EBOX 1404		018798-222 7892 EXAMINER HAND, MELANIE JO ART UNIT PAPER NUMBER 3761	LANIE JO
ALEXANDRI	A, VA 22313-1404			PAPER NUMBER
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			08/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)					
	10/809,492	GUIDOTTI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Melanie J. Hand	3761					
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with	the correspondence address	•				
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING I Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA .136(a). In no event, however, may a repl d will apply and will expire SIX (6) MONTH tte, cause the application to become ABAN	TION. y be timely filed S from the mailing date of this communical DONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 04	May 2007.						
2a) ☐ This action is FINAL . 2b) ☑ Th	This action is FINAL . 2b)⊠ This action is non-final.						
3) Since this application is in condition for allow	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 1	11, 453 O.G. 213.					
Disposition of Claims							
4) Claim(s) <u>1-6,9-19,22-24 and 26-29</u> is/are per	nding in the application.						
4a) Of the above claim(s) is/are withdr	awn from consideration.						
5) Claim(s) is/are allowed.	,						
6) Claim(s) <u>1-6,9-19,22-24,26-29</u> is/are rejected	i .						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and	or election requirement.						
Application Papers							
9) The specification is objected to by the Examir	ner.						
10) The drawing(s) filed on is/are: a) □ ac	ccepted or b) 🔲 objected to by	the Examiner.					
Applicant may not request that any objection to th	e drawing(s) be held in abeyance	e. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s)	is objected to. See 37 CFR 1.12	1(d).				
11) The oath or declaration is objected to by the I	Examiner. Note the attached (Office Action or form PTO-152					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:		19(a)-(d) or (f).					
1. Certified copies of the priority docume		sligation No					
2. Certified copies of the priority docume3. Copies of the certified copies of the priority	• •						
application from the International Bure	•	scerved in this Hattorial Stage					
* See the attached detailed Office action for a list		ceived.					
Attachment(s)							
1) X Notice of References Cited (PTO-892)	4) 🔲 Interview Sur						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)		Mail Date rmal Patent Application					
Paper No(s)/Mail Date	6) Other:						

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 4, 2007 has been entered.

Response to Arguments

Applicant's arguments filed May 4, 2007 have been fully considered but they are not persuasive.

With respect to applicant's arguments regarding the rejections over Bernardin in view of Guidotti: In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combined teaching of Bernardin and Guidotti meets all of the claim limitations of independent claims 1 and 16. The Office is unclear as to the necessity of applicant's arguments beginning on Page 7 of the Remarks in which applicant cites a response to an argument from previous Remarks submitted by applicant which are no longer relevant. In response to those arguments, Examiner changed the grounds of rejection from a rejection over Gross in view of Bernardin (Office action mailed May 25, 2006) to a rejection over Bernardin in view of Guidotti (last Office action, mailed

November 7, 2006) This argument was not presented in the rejection of claims 1 and 16 by the Office in the last Office action and thus the argument is moot.

The balance of applicant's Remarks starting on Page 8 and concluding on Page 10 regarding amended claims 1 and 16 have been considered but are moot in view of the new ground(s) of rejection. It is noted however that the combined teaching of Bernardin and Guidotti is still valid prior art and is used in this Office action to reject amended independent claims 1 and 16. Applicant has disclosed multiple embodiments, one in which the first storage layer is between the liquid permeable upper surface and one in which simply the acquisition layer is "close to the first surface of the storage layer" interpreted herein as meaning that a first storage layer is not between the liquid permeable upper surface and said acquisition layer, but merely that the first surface of the storage layer and the acquisition layer are near one another. Therefore, while applicant discloses criticality for placing the first storage layer between the acquisition layer and the liquid permeable upper surface, this criticality is effectively negated by the disclosure of an equally operable and effective embodiment in which the first storage layer is located elsewhere, for example as in the manner taught by Bernardin and Guidotti. It has been held that rearrangement of parts involves only routine skill in the art and thus modifying the article of the combined teaching of Bernardin and Guidotti so as to meet all of the limitations of amended claims 1 and 16 would be obvious to one of ordinary skill in the art with a reasonable expectation of success. See *In re Japikse*, 86 USPQ 70 (CCPA 1950)

As to applicant's arguments regarding amended dependent claims 4 and 19, the Office maintains the rejection for reasons previously stated. Applicant "continues to traverse" this rejection, but provides no additional sufficient argument or evidence other than that previously presented and addressed by the Office to overcome the rejection.

As to applicant's arguments regarding Claim 9, the arguments are not clear regarding what is actually argued by applicant. The acquisition layer referred to by applicant in the Remarks layer was never disclosed, claimed or taught by any of the prior art references, alone or in combination with other references, as an acquisition layer that passes through or between another layer. This is a physical impossibility as the acquisition layer, once in place, does not move throughout the duration of use.

As to applicant's arguments regarding claims 14, 15, 22 and 23, as stated *supra* with respect to applicant's arguments regarding the rejection of claims 1 and 16, the arguments presented are no longer relevant as they are arguing a grounds of rejection that no longer exists, i.e. Gross in view of Bernardin. Since the grounds of rejection no longer exists, the arguments do not properly address the rejections of claims 14 and 22 and are therefore insufficient to overcome said rejection.

With respect to applicant's arguments regarding the rejection of claims 10 and 12 over Bernardin in view of Guidotti and further in view of Berg: Applicant argues that the combination of the Bernardin and Berg references would destroy the function of both articles. First, the rejection of claims 10 and 12 is over the combined teaching of Bernardin and Guidotti and Berg. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Second, the relative positions of the layers as taught by Bernardin is not considered herein to relevant to the impact of function on a polyacrylate-based foam. The foam taught by Berg is an absorbent that is considered herein to be equally capable of accomplishing fluid distribution in the manner taught by Bernardin and cited by applicant. Therefore it is the Office's position that the function of any of

the articles of Bernardin and Guidotti and Berg would not be destroyed by the combination and thus the combined teaching is valid prior art and the rejection is maintained.

With respect to applicant's arguments regarding the rejection of claim 11: Again, the applicant is reminded of the correct grounds of rejection and that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The foam taught by Shepard, while not taught by Shepard to be part of a foam absorbent structure, is used in an absorbent article, has a Gurley stiffness, and is comprised of the same material as claimed and taught by Berg. Thus, the prior art of Shepard is considered herein to be reasonably pertinent to the problem the claimed invention and the combined teaching of Bernardin and Guidotti and Berg seeks to solve, i.e providing a foam material with the desired Gurley stiffness.

With respect to applicant's arguments regarding the rejection of claim 13: Applicant's arguments with regard to dependent claim 13 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 1, which have been addressed *supra*.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 7-9, 14, 15 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernardin (U.S. Patent No. 5,009,650) in view of Guidotti et al (U.S. Patent No. 6,037,518).

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With respect to Claims 1,16: Bernardin teaches an absorbent article 1 comprising a liquid permeable upper surface defined by the upper surface of liquid permeable liner 2 and an absorbent structure 4, which article in the longitudinal direction has a crotch portion seen in Fig. 1 and two end portions also seen in Fig. 1, wherein the absorbent structure 4 comprises an acquisition layer 5 and at least one first storage layer 10 wherein said first storage layer 10 comprises at least 50 percent by weight of a super absorbent material calculated on the total weight of the first storage layer, wherein the first storage layer 10 in a dry condition has a density between 0.14 – 0.3 g/cc and therefore does not teach a dry density exceeding 0.4 g/cm.sup.3. First storage layer 10 in the crotch portion of the absorbent structure has apertures or recesses in the form of pores.

Applicant has not assigned sufficient criticality to a dry density exceeding 0.4 g/cc, therefore the limitation is considered herein to be an optimization of the dry density. It would be obvious to one of ordinary skill in the art to further increase the density of the high-density layers 10,11 taught by Bernardin so as to have a density exceeding 0.4 g/cc, as Bernardin teaches that such high-density layers acquire and hold waste so as to prevent leakage.

Bernardin also does not teach that the high-density layers contain superabsorbent material. Guidotti teaches an absorbent article having a separate acquisition layer and storage layer wherein the storage layer is comprised of at least 10-80% superabsorbent material by weight of said storage layer. Since Guidotti teaches a storage layer that draws fluid from an acquisition layer, i.e. the storage layer of Guidotti performs an identical function to the storage layer of Bernardin, it would be obvious to one of ordinary skill in the art to include superabsorbent in the storage layer of Bernardin in an amount between 10-80% as taught by Guidotti with a reasonable expectation of success. This range satisfies the relevant limitation of claim 1.

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The combined teaching of Bernardin and Guidotti does not explicitly teach a first storage layer that lies between an acquisition layer and a liquid permeable upper surface. As stated *supra* in the Response to Arguments section with respect to claim 1, while applicant discloses criticality for placing the first storage layer between the acquisition layer and the liquid permeable upper surface, this criticality is effectively negated by the disclosure of an equally operable and effective embodiment in which the first storage layer is located elsewhere, for example as in the manner taught by Bernardin and Guidotti. It has been held that rearrangement of parts involves only routine skill in the art and thus modifying the article of the combined teaching of Bernardin and Guidotti so as to meet all of the limitations of amended claims 1 and 16 would be obvious to one of ordinary skill in the art with a reasonable expectation of success. See *In re Japikse*, 86 USPQ 70 (CCPA 1950)

With respect to Claim 2: Bernardin does not teach a dry density exceeding 0.5 g/cm.sup.3. Applicant has not assigned sufficient criticality to a dry density exceeding 0.5 g/cc, therefore the limitation is considered herein to be an optimization of the dry density. It would be obvious to one of ordinary skill in the art to further increase the density of the high-density layers 10,11 taught by Bernardin so as to have a density exceeding 0.4 g/cc, as Bernardin teaches that such high-density layers acquire and hold waste so as to prevent leakage.

With respect to Claim 3: Bernardin also does not teach that the high-density layers contain superabsorbent material in an amount of at least 70% by weight. Guidotti teaches an absorbent article having a separate acquisition layer and storage layer wherein the storage layer is comprised of at least 10-80% superabsorbent material by weight of said storage layer. Since Guidotti teaches a storage layer that draws fluid from an acquisition layer, i.e. the storage layer

of Guidotti performs an identical function to the storage layer of Bernardin, it would be obvious to one of ordinary skill in the art to include superabsorbent in the storage layer of Bernardin in an amount between 10-80% as taught by Guidotti with a reasonable expectation of success. This range satisfies the relevant limitation of claim 3.

With respect to Claims 4,19: Bernardin teaches that first storage layer 10 contains pores, which Examiner considers herein to satisfy the limitation of at least one aperture that extends through an entire thickness of the first storage layer.

With respect to Claims 7,20: The first storage layer 10 has a first surface facing the liquid permeable upper surface of the article and a second surface facing away from the liquid permeable surface of the article, wherein the acquisition layer 5 lies close to the first surface of the storage layer 10 as seen in Fig. 7.

With respect to **Claims 8,21:** Bernardin does not teach that the acquisition layer is placed between the topsheet 2 and the first storage layer 10, however placing an acquisition layer between a topsheet and a storage layer (e.g. an absorbent core) is well known in the art (see U.S. Patent No. 6,479,415 to Erspamer et al, Col. 1, lines 18-22, 31-34, 65 – Col. 2, line 1). Therefore since the device of Bernardin seeks to solve a similar problem in the art, it would be obvious to one of ordinary skill in the art to modify the device of Bernardin such that said acquisition layer is placed between said topsheet and said first storage layer with a reasonable expectation of success.

With respect to Claim 9: Bernardin does not teach that the liquid permeable top sheet 2 and the acquisition layer 5 are thermally joined in a hollow space in the first storage layer created by said apertures or recesses. However, an article as taught by Bernardin in which the acquisition layer 5 is bonded in the manner set forth in claim 9 would produce a substantially structurally identical article to that taught by Bernardin in the instant invention. It would be obvious to one of ordinary skill in the art to bond the acquisition layer taught by Bernardin such that the layer is thermally bonded in the recesses as an alternative to simply bonding the acquisition layer to the topsheet at the peripheral edges as taught by Bernardin. Rejection under 35 U.S.C. 103 is indicated where prior art discloses product that appears to be either identical with or only slightly different from product claimed in product-by-process claim. See *In re Fitzgerald, Sanders*, & *Bagheri*, 205 USPQ 594 (CCPA 1980).

With respect to Claims 14,22: The absorbent structure 1 further comprises a second storage layer 11. Bernardin teaches that the two storage layers are each equivalent to a single storage layer 6 in an alternate embodiment, and Bernardin teaches combining said storage layer 6 (and thus by extension layer 11) with other absorbents to achieve a lower density depending upon the application of the absorbent structure of the instant invention. Bernardin does not explicitly teach that the high-density layers contain superabsorbent material or that second storage layer 11 contains less superabsorbent by weight than first storage layer 10.

Guidotti teaches an absorbent article having a separate acquisition layer and storage layer wherein the storage layer is comprised of at least 10-80% superabsorbent material by weight of said storage layer. Since Guidotti teaches a storage layer that draws fluid from an acquisition layer, i.e. the storage layer of Guidotti performs an identical function to the storage layer of Bernardin, it would be obvious to one of ordinary skill in the art to include

superabsorbent in the storage layers 10,11 of Bernardin with a reasonable expectation of success. The combined teaching of Bernardin thus teaches a second storage layer having a lower density (i.e. lower amount of superabsorbent) than a first storage layer.

With respect to Claim 15,23: Bernardin teaches second storage layer 11 but does not teach that said second storage layer partly or entirely encloses the first storage layer. However, it would be obvious to one of ordinary skill in the art to expand the surface area of said second storage layer so as to partly or entirely enclose said first storage layer as the increased surface storage area allows for greater fluid handling capability and prevention of leakage.

With respect to Claim 17: The absorbent structure 4 comprises an acquisition layer 5 and at least one first storage layer 10 wherein said first storage layer 10 comprises at least 50 percent by weight of a super absorbent material calculated on the total weight of the first storage layer

With respect to Claim 18: The first storage layer 10 in a dry condition has a density between 0.14 – 0.3 g/cc and therefore does not teach a dry density exceeding 0.4 g/cm.sup.3. First storage layer 10 in the crotch portion of the absorbent structure has apertures or recesses in the form of pores.

Applicant has not assigned sufficient criticality to a dry density exceeding 0.4 g/cc, therefore the limitation is considered herein to be an optimization of the dry density. It would be obvious to one of ordinary skill in the art to further increase the density of the high-density layers 10,11 taught by Bernardin so as to have a density exceeding 0.4 g/cc, as Bernardin teaches that such high-density layers acquire and hold waste so as to prevent leakage.

With respect to claims 27,29: The pores (apertures) taught by Bernardin are spaces capable of holding liquid before the liquid is absorbed by said first storage layer 10, as the boundaries of the pores are defined by absorbent fibers. ('650, Col. 5, lines 59-65)

Claims 5, 6, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernardin (U.S. Patent No. 5,009,650) in view of Guidotti et al (U.S. Patent No. 6,037,518) as applied to claims 1-4, 7-9, 14, 15, 19-23, 27 and 29 above, and further in view of Lassen et al (U.S. Patent Application Publication No. 2002/0013563).

With respect to Claims 5,26,28: Bernardin does not teach that said apertures extend along the longitudinal direction of the absorbent structure, wherein the apertures or recesses comprise longitudinal channels. Lassen teaches that the recesses define a segmented core with segments of this width so as to accommodate flexure axes to allow it to bend preferentially convexly toward the user's body to put said article in a more advantageous position to perform its function, therefore it would be obvious to one of ordinary skill in the art to modify the device of Bernardin so as to have apertures comprising longitudinal channels having a width of no greater than 20 mm as this allows the crotch portion of the article to conform to fit the crotch area of the user as taught by Lassen.

With respect to Claim 6: Lassen teaches that the width of article 10 is in the range of 2-10 cm, or 20-100 mm (¶ 0057), therefore the material between will exhibit a width being maximally 20 mm.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernardin (U.S. Patent No. 5,009,650) in view of Guidotti et al (U.S. Patent No. 6,037,518) as applied to claims 1-4, 7-9, 14, 15, 19-23, 27 and 29 above, and further in view of Berg et al (U.S. Patent No. 5,180,622).

With respect to Claims 10 and 12: Bernardin does not teach that acquisition layer 11 is comprised of polyacrylate foam material. Berg teaches a polyacrylate foam material used in an absorbent core 41 of a diaper 20. (Fig. 1) (Col. 22, lines 61-65). Said absorbent core is comprised of an acquisition zone 56 (Col. 32, lines 35-44) and since the core material is uniform throughout, said acquisition zone 56 is also comprised of polyacrylate foam material. (claim 10) Berg teaches that said foam material is formed by an acrylic acid monomer allowed to polymerize with the aid of an interparticle crosslinking agent sprayed on the acrylic acid monomers. (Col. 7, lines 40-46, Co. 14, lines 28-39) (claim 12) Berg teaches that such a material especially in film form integrated in an absorbent article enhances fluid uptake rate and minimizes gel blocking (Abstract), therefore it would obvious to one of ordinary skill in the art to modify the acquisition layer taught by Bernardin to be comprised of a polyacrylate foam sheet material as taught by Berg.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable Bernardin (U.S. Patent No. 5,009,650) in view of Guidotti et al (U.S. Patent No. 6,037,518) and further in view of Berg et al (U.S. Patent No. 5,180,622) as applied to claims 10 and 12 above, and further in view of Shepard et al (U.S. Patent No. 6,869,659).

With respect to Claim 11: The combined teaching of Bernardin and Guidotti and Berg does not teach an absorbent article comprising a polyacrylate foam acquisition layer having a Gurley stiffness of less than 1,000 mgf.

Shepard teaches a foam coating applied to a nonwoven web as a backing that is an acrylic foam. Shepard teaches that the web having the foam coating is the backing for a loop fastener fabric, wherein the loop fabric has a Gurley stiffness of less than 300 mg. The loop fabric has a slight stiffness that Shepard teaches can be reduced, therefore the stiffness of the foam itself cannot be greater than 1,000 mgf if the stiffness of the entire fabric, comprised of thin flexible nonwoven materials, has a stiffness of less than about 300 mgf. Shepard teaches that such a foam coating results in a thin, flexible loop fastener fabric, therefore it would be obvious to one of ordinary skill in the art to employ a foam layer or coating in the article taught by the combined teaching of Bernardin and Guidotti and Berg so as to have a Gurley stiffness for the acquisition layer of less than 300 mgf as taught by Shepard.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernardin (U.S. Patent No. 5,009,650) in view of Guidotti et al (U.S. Patent No. 6,037,518) as applied to claims 1-4, 7-9, 14, 15, 19-23, 27 and 29 above, and further in view of McBride (U.S. Patent Application Publication No. 2004/0019340).

With respect to Claim 13: The combined teaching of Bernardin and Guidotti does not teach corona treating the acquisition layer 5. McBride teaches an absorbent article having a topsheet and acquisition layer in which either or both are treated to improve affinity to water and water handling, therefore it would be obvious to one of ordinary skill in the art to corona treat the

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acquisition layer taught by the combined teaching of Bernardin and Guidotti to improve its affinity for water and fluid handling as taught by McBride. ('340, ¶0037)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand Examiner Art Unit 3761

July 18, 2007

TATYANA ZALUKAEVA SUPERVISORY PRIMARY EXAMINER